



# LXXI International conference "NUCLEUS – 2021. Nuclear physics and elementary particle physics. Nuclear physics technologies"

## Monday 20 September 2021

### Section 2. Experimental and theoretical studies of nuclear reactions (13:35 - 18:05)

-Conveners: Nikita Prokofyev

time	[id] title	presenter
13:35	Beginning of the session	
14:00	[48] Time-dependent description of reactions with weakly bound nuclei ${}^{11}\text{Li}$ , ${}^{11}\text{Be}$	SAMARIN, Viacheslav
14:25	[34] REACTION CROSS SECTIONS FOR 10,11,12Be BEAM IONS ON 28Si, 59Co, 181Ta TARGETS	Mr STUKALOV, Sergey
14:50	[133] Microscopic analysis of elastic scattering of one-proton halo nucleus ${}^{17}\text{F}$ on different mass targets	GAIDAROV, Mitko
15:15	Coffee break	
15:35	[261] CLUSTERING AND MICROSCOPICALLY SEPARATED STATES FORMATION IN FISSION POTENTIAL ENERGY CALCULATIONS	Dr UNZHAKOVA, Anna
16:00	[379] Studies of the reactions ${}^9\text{Be}(p,d)$ and ${}^9\text{Be}(p,\alpha)$ in the energy range of 300-1400 keV	ZAZULIN, D.M.
16:25	[304] Cross section measurement of the ${}^{13}\text{C}(\alpha,n){}^{16}\text{O}$ reaction in the 2-6.2 MeV $\alpha$ -particle energy range	Mr PRUSACHENKO, Pavel
16:50	End of session	

## Tuesday 21 September 2021

### Section 2. Experimental and theoretical studies of nuclear reactions (13:50 - 18:00)

-Conveners: Nikolai Maltcev

time	[id] title	presenter
13:50	[248] SPONTANEOUS AND INDUCED TERNARY AND QUATERNARY FISSION AS A VIRTUAL PROCESSES	TITOVA, Larisa
14:15	[343] Advances in modeling of fast neutron induced fission on $^{232}\text{Th}$	Dr OPREA, Cristiana
14:40	[160] $^{238}\text{U}$ IN THE NEUTRON FIELD AND THE BREMSSTRAHLUNG RADIATION FIELD ON THE BEAMS OF PROTONS AND ELECTRONS OF THE ACCELERATORS AT JINR: CALCULATIONS AND EXPERIMENTS	Mr TRAN, Toan Dr STEGAILOV, Vladimir
15:05	[361] STUDIES OF ISOMERIC STATES OF NUCLEI ON THE PROTON BEAM OF THE PHASOTRON AND ELECTRON BEAM OF THE LINAC-200 ACCELERATORS AT JINR USING THE $^{209}\text{Bi}$ , $^{238}\text{U}$ , $^{165}\text{Ho}$ TARGETS	Dr STEGAILOV, Vladimir
15:30	Coffee break	
15:50	[102] HIDDEN VARIABLES IN ANGULAR CORRELATIONS OF THE PARTICLES EMITTED IN FISSION	KARPESHIN, Feodor
16:15	[6] Joint report: DISTORTIONS OF THE REGISTRATION OF DELAYED NEUTRONS FROM $^{238}\text{U}$ FOTOFISSION BY A SCINTILLATION SPECTROMETER IN Pb PROTECTION BETWEEN LEA PULSES AND POSSIBILITY OF ISOLATING A COMPONENT WITH $T_1 / 2 = 1$ ms.	DZHILAVYAN L.Z., 1
17:05	[360] $^{237}\text{Np}$ , $^{239}\text{Pu}$ ACTINIDES IN THE NEUTRON FIELD OF THE "QUINTA" URANIUM TARGET	RASULOVA, F.A. Dr STEGAILOV, V.I.
17:30	[362] THE FIRST EXPERIMENTS AT $E = 180$ MEV ON THE ELECTRON BEAM OF THE LINAC-200 ACCELERATOR TO DETERMINE ISOMERS OF BISMUTH AND LEAD	RASULOVA, F.A. Dr STEGAILOV, Vladimir

**Wednesday 22 September 2021****Section 2. Experimental and theoretical studies of nuclear reactions (13:30 - 18:00)****-Conveners: Vladislav Sandul**

time	[id] title	presenter
13:30	[153] Characteristics of Heavy-Ion Fragmentation Reactions at Fermi Energies	Dr MIKHAILOVA, Tatiana
13:55	[181] A Systematic Study of Excitation Functions of Various Evaporation Residues in Heavy Ion Reactions at Moderate Excitation Energy: Incomplete Fusion Vs Complete Fusion	AGARWAL, AVINASH
14:20	[189] Alpha decay of Polonium isotopes using different choices of assault frequency	SHARMA, Nitin Prof. SHARMA, Manoj Kumar
14:45	[330] ALPHA PARTICLES EMISSION IN FAST NEUTRONS PROCESSES ON <sup>143</sup> ND NUCLEUS	OPREA, Alexandru Ioan
15:10	Coffee break	
15:30	[65] Test setup for registration of coincident signals from reactions with the emission of charged particles and neutrons on the RADEX channel	KASPAROV, Aleksandr
15:55	[27] NEW PHOTONEUTRON REACTION CROSS SECTIONS FOR Pb ISOTOPES	Prof. VARLAMOV, Vladimir
16:20	[250] Non-statistical nature of fragments' spin distributions in binary nuclear fission	LYUBASHEVSKY, Dmitrii
16:45	[49] Analysis of neutron-induced fission cross-sections of Pb isotopes near the closed neutron shell	ONEGIN, Mikhail
17:10	[67] Separation efficiency and separation time of mass separator MASHA measured for radon and mercury isotopes	KOHOUTOVÁ, Alena
17:35	[108] Spin-correlation experiment for investigating dd reactions in PNPI	Mr SOLOVYEV, Ivan

# Thursday 23 September 2021

## Section 2. Experimental and theoretical studies of nuclear reactions (15:00 - 19:00)

-Conveners: Agniya Zvyagina; Alexaner Zharov

time	[id] title	presenter
15:00	Beginning of the session	
15:25	[150] DATA ANALYSIS FROM CATCHER FOIL EXPERIMENT FOR CROSS SECTIONS MESUREMENT OF $^{40}\text{Ar} + ^{144}\text{Sm}$ REACTION	Mr OPÍČHAL, Antonín
15:50	[168] Production cross sections of mercury and radon isotopes in complete fusion reactions with $^{36,40}\text{Ar}$ and $^{40,48}\text{Ca}$ projectiles	Dr CHERNYSHEVA, Elena
16:15	[350] DETERMINATION OF PHOTONEUTRON PRODUCTION FROM DIFFERENT TARGETS IRRADIATED BY ELECTRON BEAM	MELYAN, Elmira
16:40	Coffee break	
16:55	[234] Study of reactions with proton emission at $E_{\text{max}} = 20$ MeV on natural and enriched hafnium targets	Dr SAVRASOV, Andrij
17:20	[178] Study of photonuclear reactions with the charged particles emission for the zirconium-89 production	Mr REMIZOV, Pavel
17:45	[230] Study of $(\gamma, p)$ -reactions on tungsten isotopes	Prof. ZHELTONOZHISKY, Viktor
18:10	[151] Potentials for $\alpha + ^{116,122,124}\text{Sn}$ elastic scattering	Prof. ABDULLAH, M. Nure Alam
18:35	End of session	

# Saturday 25 September 2021

## Section 2. Experimental and theoretical studies of nuclear reactions (14:00 - 18:50)

-Conveners: Vitalii Petrov

time	[id] title	presenter
14:00	[75] Decay branching ratio of main and excited states of $^{11}\text{B}$ nucleus produced by neutron from 1 to 6 MeV	POTASHEV, Stanislav
14:25	[68] Study of fusion, transfer, and breakup reactions with weakly bound nuclei $^6\text{Li}$ , $^8\text{He}$	SAMARIN, Viacheslav
14:50	[226] $^6\text{Li}(d,p)^7\text{Li}$ , $^6\text{Li}(d,p1)^7\text{Li}^*(0.478\text{ MeV})$ , $^6\text{Li}(d,p2)^7\text{Li}^*(4.63\text{ MeV})$ , $^6\text{Li}(d,p4)^7\text{Li}^*(7.46\text{ MeV})$ reaction cross section	Ms SELYANKINA, Svetlana
15:15	[9] Creation of radioactive C-14 under thunderstorm atmospheric flashes	LYASHUK, Vladimir
15:40	[353] ASTROPHYSICAL S-FACTOR $S_{1,16}$ EVALUATION USING ANCs $^{17}\text{F} \rightarrow ^{16}\text{O} + p$ FROM ANALYSIS OF THE $^{16}\text{O}(^{10}\text{B}, ^9\text{Be})^{17}\text{F}$ REACTION	Mr ERGASHEV, Feruzjon
16:05	Coffee break	
16:20	[378] INVESTIGATION OF $(d,d)$ AND $(d,t)$ REACTIONS ON $^{11}\text{B}$ NUCLEI AT ENERGY OF 14.5 MeV	NASSURLLA, Maulen
16:45	[4] REGISTRATION OF g-QUANTA FOR DETECTING $^{12}\text{B}$ AND $^{12}\text{N}$ - ACTIVITIES PRODUCED AT THE PULSED ELECTRON ACCELERATOR IN THE REACTIONS $^{13}\text{C}(g, p)$ ; $^{14}\text{N}(g, 2p)$ ; $^{14}\text{N}(g, 2n)$	DZHILAVYAN L.Z. 1
17:10	[222] Exclusive study of Pre-Equilibrium Emission of Alpha Particles in Alpha Induced Reactions at Moderate Excitation Energy	Dr AGARWAL, AVINASH
17:35	[220] Possibility of identifying the virtual component in scission neutrons	KADMENSKY, Stanislav
18:00	[30] Study of the excited states of $^{46}\text{Ti}$ and $^{45}\text{Ti}$ nuclei in the $^{45}\text{Sc} + ^3\text{He}$ reaction at a $^3\text{He}$ beam energy of 29 MeV	ISSATAYEV, Talgat
18:25	[24] FEATURES OF DATA PROCESSING OF AN EXPERIMENT ON STUDYING PROTON-PROTON CORRELATIONS IN THE $d + ^1\text{H} \rightarrow p + p + n$ REACTION	MITCUK, Viacheslav